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09/593,864	06/15/2000	Tooru Kamibayashi	04329.2319	9097

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EXAMINER

NORRIS, TREMAYNE M

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 06/17/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/593,864

Applicant(s)

KAMIBAYASHI ET AL.

Examiner

Tremayne M. Norris

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection. It is viewed that the AV decoder is a component that is a part of the recording/reproducing apparatus (col.6 lines 55-57). It is viewed that the optical disc and optical disc drive are one entity because the optical disc drive reads the encrypted key information from the optical disc and then uses that information for the mutual authentication process (fig.15; col.23 lines 42-45; col.24 lines 8-10). Therefore, the examiner maintains the rejection given below.

### ***Drawings***

1. The drawings are objected to because reference number "S305" generates random number "R1" when it should be "R2". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9 rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al.

Regarding Claim 1, Ueda et al teach a mutual authentication method for use between a recording apparatus which records copied contents on a recording medium having an arithmetic processing function, and the recording medium, said method comprising the steps of:

storing in the recording medium at least first information which depends on the recording medium, and second information which is to be shared by the recording apparatus in executing mutual authentication with the recording apparatus and depends on the recording medium; and

generating by the recording apparatus authentication information used in mutual authentication with the recording medium on the basis of only the first information obtained from the recording medium, and executing mutual authentication between the recording apparatus and the recording medium using the generated authentication information and the second information (col.2 line 61 thru col.3 line 5; col.3 line 45 thru col.5 line 64), wherein executing the mutual authentication includes the steps of

generating a random number in the recording apparatus and transferring the random number to the recording medium (col.37 line 18-23),

generating a first function in the recording apparatus using the generated authentication information and the generated random number (col.37 lines 45-49),

generating a second function in the recording medium using the generated second information and the transferred random number, and transferring the second function to the recording apparatus (col.37 lines 34-37), and

comparing the generated first function with the generated second function in the recording apparatus (col.37 lines 49-51).

Regarding Claim 2, Ueda et al teach the method according to claim 1, further comprising the step of: generating the authentication information by encrypting the first information using an encryption key obtained from the recording medium (col.4 lines 3-4; col.4 lines 43-51).

Regarding Claim 3, Ueda et al teach a mutual authentication method for use between a reproducing apparatus which reproduces copied contents recorded on a recording medium having an arithmetic processing function, and the recording medium, said method comprising the steps of:

storing in the recording medium at least first information which depends on the recording medium, and second information which is to be shared by the reproducing

apparatus in executing mutual authentication with the reproducing apparatus and depends on the recording medium; and

generating by the reproducing apparatus authentication information used in mutual authentication with the recording medium on the basis of only the first information obtained from the recording medium, and executing mutual authentication between the reproducing apparatus and the recording medium using the generated authentication information and the second information (col.2 line 61 thru col.3 line 5; col.3 line 45 thru col.5 line 64), wherein executing the mutual authentication includes the steps of

generating a random number in the reproducing apparatus and transferring the random number to the recording medium (col.37 line 18-23),

generating a first function in the reproducing apparatus using the generated authentication information and the generated random number (col.37 lines 45-49),

generating a second function in the recording medium using the generated second information and the transferred random number, and transferring the second function to the reproducing apparatus (col.37 lines 34-37), and

comparing the generated first function with the generated second function in the reproducing apparatus (col.37 lines 49-51).

Regarding Claim 4, Ueda et al teach the method according to claim 3, further comprising the step of:

generating the authentication information by encrypting the first information using an encryption key obtained from the recording medium (col.4 lines 3-4; col.4 lines 43-51).

Regarding Claim 5, Ueda et al teach a recording apparatus for recording copied contents on a recording medium while limiting the number of copied contents to be recorded on the recording medium, said apparatus comprising:

generation means for generating authentication information, which is used in mutual authentication with the recording medium and is to be shared by the recording medium, on the basis of first information which is obtained from the recording medium and depends on the recording medium; and

mutual authentication means for executing mutual authentication with the recording medium using the authentication information generated by said generation means (col.2 line 61 thru col.3 line 5; col.3 line 45 thru col.5 line 64; col.18 lines 10-32; col.21 lines 25-29), wherein the mutual authentication means includes

means for generating a random number and transferring the random number to the recording medium (col.37 line 18-23),

means for generating a first function using the generated authentication information and the generated random number (col.37 lines 45-49),

means for receiving from the recording medium a second function generated using second information and the transferred random number (col.37 lines 34-37), and

means for comparing the generated first function with the generated second function (col.37 lines 49-51).

Regarding Claim 6, Ueda et al teach an apparatus according to claim 5, wherein said generation means generates the authentication information by encrypting the first information using an encryption key obtained from the recording medium (col.4 lines 3-4; col.4 lines 43-51).

Regarding Claim 7, Ueda et al teach a reproducing apparatus for reproducing copied contents recorded on a recording medium while limiting the number of copied contents to be recorded on the recording medium, said apparatus comprising:

generation means for generating authentication information, which is used in mutual authentication with the recording medium and is to be shared by the recording medium, on the basis of first information which is obtained from the recording medium and depends on the recording medium; and

mutual authentication means for executing mutual authentication with the recording medium using the authentication information generated by said generation means (col.2 line 61 thru col.3 line 5; col.3 line 45 thru col.5 line 64; col.18 lines 10-32; col.21 lines 25-29), wherein the mutual authentication means includes

means for generating a random number and transferring the random number to the recording medium (col.37 line 18-23),



means for generating a first function using the generated authentication information and the generated random number (col.37 lines 45-49),  
means for receiving from the recording medium a second function generated using second information and the transferred random number (col.37 lines 34-37), and  
means for comparing the generated first function with the generated second function (col.37 lines 49-51).

Regarding Claim 8, Ueda et al teach an apparatus according to claim 7, wherein said generation means generates the authentication information by encrypting the first information using an encryption key obtained from the recording medium (col.4 lines 3-4; col.4 lines 43-51).

Regarding Claim 9, Ueda et al teach a recording medium having an arithmetic processing function, comprising:

storage means for pre-storing first information which is unique to said recording medium, and second information which is to be shared by a recording apparatus for recording copied contents on said recording medium and a reproducing apparatus for reproducing the copied contents in executing mutual authentication among the recording medium, the recording apparatus, and the reproducing apparatus, and depends on said recording medium; and

mutual authentication means for executing mutual authentication between the recording medium and the recording apparatus, and between the recording medium and the reproducing apparatus using authentication information generated based on the first information by the recording apparatus and the reproducing apparatus, and the second information (col.4 lines 3-4; col.4 lines 43-51), wherein the mutual authentication means includes

means for generating a random number and transferring the random number to one of the recording apparatus and the reproducing apparatus (col.37 lines 59-63),

means for generating a first function using the generated authentication information and the generated random number (col.38 lines 13-17),

means for receiving from one of the recording apparatus and the reproducing apparatus a second function generated using the authentication information and the transferred random number (col.38 lines 4-13), and

means for comparing the generated first function with the generated second function (col.38 lines 17-19).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tremayne M. Norris whose telephone number is (703) 305-8045. The examiner can normally be reached on M-F 7:30AM-5:00PM alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703) 305-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tremayne Norris

June 3, 2004

*Matthew B. Smithers*  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*